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EXAMINER

PEREZ, ANGELICA

ART UNIT	PAPER NUMBER
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2684

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/050,861

Applicant(s)

HAYASHI ET AL.

Examiner

Perez M. Angelica

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 02/01/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on 02/01/2005 has been considered by the examiner.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-5, 20-24, 36 and 46-47 are rejected under 35 U.S.C. 102(e) as being anticipated by Parmenter (Parmenter, Kevin C.; US Patent No.: 6,615,052 B1).

Regarding claims 1 and 20, Parmenter teaches of a transmission power control apparatus (column 4, lines 7-11; e.g., "control processor") and method (column 4, lines 12-19) for a wireless communication apparatus for reducing a power value of a signal

input to a power amplifier to the maximum allowable input power value of the power amplifier or below (column 4, lines 1-11; where the control processor adjusts the power to a "limit" output power corresponding to a "maximum allowable input"), the transmission power control apparatus comprising: transmission power control parts each for controlling a transmission power of a call according to transmission power control information sent from a communication apparatus that is a sending destination of the call (figure 2, where parts 212, 214, 218, 106 and 108 control the power of the signal according to a "maximum allowable input"); a setting part for setting a transmission power upper limit value for each of the transmission power control parts (figure 2, items 212, 214, 218, 106 and 108 are set according to the adjusted maximum value allowable for a signal received) and, the transmission power upper limit value being determined according to a circuit type of the call (column 4, lines 1-11 and column 3, lines 6-9; where the appropriate power levels require a maximum allowable level without violating the integrity of the amplifier); where each transmission power control part reduces the transmission power for the call to the transmission power upper limit value or below (column 8, lines 18-20; where the power level is reduced in order to optimize the power consumption. Also, column 6, lines 6-26; where the different components are dynamically adjusted to output a signal that does not violate the limit of the amplifier).

Regarding claims 2 and 21, Parmenter teaches all the limitations of claims 1 and 20, respectively. Parmenter further teaches where the setting part sets the transmission power upper limit value according to a degree of delay which can be allowed for the

circuit type (column 3, lines 6-20; where inherently voice and data channels require different degrees of delay. E.g., voice does not tolerate high degrees of delay and data can tolerate higher degrees of delay).

Regarding claims 3 and 22, Parmenter teaches all the limitations of claims 1 and 20, respectively. Parmenter further teaches where the setting part sets a first upper limit value for a call of a packet switching type or a second upper limit value for a call of a circuit switching type (column 3, lines 6-9; where the settings are preset according to the communication type, voice or data; where packet switching type corresponds to data communications and circuit switching type corresponds to voice communications. Therefore a first upper limit or second upper limit value is preset according to the type of communication).

Regarding claims 4 and 23, Parmenter teaches all the limitations of claims 3 and 4, respectively. Parmenter further teaches where the first upper limit value is smaller than the second upper limit value (column 3, lines 6-18; where the first upper limit value is smaller than a second upper limit value if it corresponds to the limit for voice communications).

Regarding claims 36, 46 and 47, Parmenter teaches of a method (column 4, lines 12-19) and a transmission power control apparatus (column 4, lines 7-11; e.g., "control processor") for a wireless communication apparatus for reducing a power value of a signal of calls input to a power amplifier to the maximum allowable input power value of the power amplifier or below (column 4, lines 1-11; where the control processor adjusts the power to a "limit" output power corresponding to a "maximum allowable input").

Toskala teaches of a base station in a wireless communications system that comprises the power control apparatus (col. 44, lines 4-19). Parmenter further teaches of the transmission power control apparatus comprising: a classifying part for classifying calls into a plurality of groups (figure 3, item 318; where the calls are classified as data calls, 322 or voice calls, 320); a power reducing part for reducing a power value individually for each group such that a power value of the calls is equal to or below the maximum allowable input power value of the power amplifier (column 4, lines 1-11; where the control processor adjusts the power to a "limit" output power corresponding to a "maximum allowable input". Also, the adjustment is done for each channel and each channel transmits a type of communication, voice or data).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5-7 and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parmenter in view of Chuah et al. (Chuah, US Patent No.: 6,587,672 B1).

Regarding claims 5, 7, 23-24 and 26, Parmenter in view of Chuah teaches all the limitations of claims 3, 1, 22 and 20, respectively.

Parmenter in view of Chuah does not teach where the setting part monitors occurrence of over-input to the power amplifier, and sets another transmission power upper limit value when the over-input occurs.

In related art, concerning a method and apparatus for enhanced power ramping via multi-threshold detector, Chuah teaches where the setting part monitors occurrence of over-input to the power amplifier, and sets another transmission power upper limit value when the over-input occurs (column 8, lines 40-46; where the power level exceeds a threshold and the a higher power limit transmit is set; e.g., "1 dB" higher).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Parmenter's transmission power control apparatus with Chuah's power upper limit change in order for not limiting the signal detection to access request signals but rather other type of signals, e.g., data signal, control signal or other type of signal, as taught by Chuah.

Regarding claims 6 and 25, Parmenter in view of Chuah teaches all the limitations of claims 5 and 24, respectively. Parmenter further teaches where the setting part reduces the first upper limit value by a first predetermined ratio when the over-input to the power amplifier occurs, and the setting part increases the first upper limit value by a second predetermined ratio which is lower than the first predetermined ratio when the over-input to the power amplifier does not occur (column 8, lines 12-20; where if there is no over-input, the power level is reduced to a minimum allowable in order to optimize power consumption).

5. Claims 8 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parmenter in view of Johansson et al. (Johansson, US Patent no.: 6,804,520 B1).

Regarding claims 8 and 27, Parmenter teaches all the limitations of claims 1 and 20, respectively.

Parmenter does not teach where the setting part monitors occurrence of call loss, and sets another transmission power upper limit value when the call loss occurs.

In related art, concerning a temporary serviced interruption for high speed data transfer, Johansson teaches of where the setting part monitors occurrence of call loss, and sets another transmission power upper limit value when the call loss occurs (columns 1 and 2, lines 63-67 and 1-18, respectively and columns 5 and 6, lines 19-67 and 1-29, respectively; where the system records information regarding loss of communication; e.g., de-allocation, and the transmit power is adjusted in order to prevent loss of calls or overload of the system).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Parmenter's transmission power control apparatus with Johansson's adjustment transmission power upper limit value when the call loss occurs in order to prevent loss of calls or overload of the system, as taught by Johansson.



6. Claims 9-14, 17-18, 37-45, 28-33 and 48-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parmenter in view of Toskala et al. (Toskala, US Patent 6,374,118 B1).

Regarding claims 9 and 28, Parmenter teaches of a transmission power control apparatus and method for a wireless communication apparatus for reducing a power value of a signal input to a power amplifier to the maximum allowable input power value of the power amplifier or below (column 4, lines 1-11; where the control processor adjusts the power to a "limit" output power corresponding to a "maximum allowable input"), the apparatus comprising: transmission power control parts each for controlling a transmission power of a call according to transmission power control information sent from a communication apparatus that is a sending destination of the call (figure 2, where parts 212, 214, 218, 106 and 108 control the power of the signal according to a "maximum allowable input")

Parmenter does not specifically teach of the transmission power control apparatus comprising: an SIR determining part for determining a control target SIR according to a circuit type of the call; a target SIR setting part for sending the control target SIR to a communication station corresponding to the call, where the communication station determines the transmission power control information by comparing the control target SIR with an SIR of a received signal.

In related art, concerning a method of physical radio channel power control, Toskala teaches of the transmission power control apparatus comprising: an SIR determining part for determining a control target SIR according to a circuit type of the

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call (columns 3 and 6, lines 37-67, respectively; where the carrier/interference is set according to the service; e.g., "circuit-switched" or "packet-switched"); a target SIR setting part for sending the control target SIR to a communication station corresponding to the call (column 6, lines 13-25; where the sent SIR determines the type of service required and the power), where the communication station determines the transmission power control information by comparing the control target SIR with an SIR of a received signal (column 6, lines 8-25; where "the receiver measures a quality attribute of the received data").

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Parmenter's transmission power control apparatus with Toskala's SIR determining part in order to perform power control according to the service required, as taught by Toskala.

Regarding claims 10 and 29, Parmenter in view of Toskala teaches all the limitations of claims 9 and 28, respectively. Toskala further teaches where, the SIR determining part sets the control target SIR according to a degree of delay which can be allowed for the circuit type (columns 6 and 8, lines 10-12 and 26-42; where the SIR target is set according to the delay of the communication service and where data and speech tolerate different degrees of delays).

Regarding claims 11 and 30, Parmenter in view of Toskala teaches all the limitations of claims 9 and 28, respectively. Parmenter further teaches where the setting part sets a first upper limit value for a call of a packet switching type or a second upper limit value for a call of a circuit switching type (column 3, lines 6-9; where the settings

are preset according to the communication type, voice or data; where packet switching type corresponds to data communications and circuit switching type corresponds to voice communications. Therefore a first upper limit or second upper limit value is preset according to the type of communication). Toskala further teaches where the SIR determining part sets a first control target SIR for a call of a packet switching type or a second control target SIR for a call of a circuit switching type (columns 2, 6 and 7, lines 3-16, 10-12 and 1-17, respectively; where the settings comply with the type of service; e.g., target SIR for speech and data are "-4.2 dB" and "-3.5 dB", respectively).

Regarding claims 12 and 31, Parmenter in view of Toskala teaches all the limitations of claims 11 and 30, respectively. Toskala further teaches where the first control target SIR is smaller than the second control target SIR (col. 6, line 10-12; where "-4.2 dB" is smaller than "-3.5 dB").

Regarding claims 13, 32 and 34. Parmenter in view of Toskala teaches all the limitations of claims 11, 30 and 28, respectively. Toskala further teaches where the SIR determining part monitors occurrence of over-input to the power amplifier, and sets another control target SIR when the over-input occurs (col. 6, lines 21-25; where if capacity is exceeded, power is increased in order to accommodate for the over-input).

Regarding claims 14 and 33, Parmenter in view of Toskala teaches all the limitations of claims 13 and 32, respectively. Parmenter further teaches where, the SIR determining part reduces the first control target SIR by a first predetermined ratio when the over-input to the power amplifier occurs, and the SIR determining part increases the first control target SIR by a second predetermined ratio which is lower than the first

predetermined ratio when the over-input to the power amplifier does not occur (column 8, lines 12-20; where if there is no over-input, the power level is reduced to a minimum allowable in order to optimize power consumption). Toskala further teaches of the SIR determining part (column 6, lines 13-25; where the sent SIR determines the type of service required and power).

Regarding claim 17, Parmenter teaches all the limitations of claim 1.

Parmenter does not specifically teach where the transmission power control apparatus is provided in a base station of a wireless communication system.

In related art, concerning a method of physical radio channel power control, Toskala teaches where the transmission power control apparatus is provided in a base station of a wireless communication system (col. 44, lines 4-19).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Parmenter's transmission power control apparatus with Toskala's transmission power control apparatus in a base station in order to provide provide both up-link and down-link communications in a cellular communications system, as taught by Toskala.

Regarding claim 18, Parmenter in view of Toskala teaches all the limitations of claim 9. Toskala further teaches where the transmission power control apparatus is provided in a base station of a wireless communication system (col. 44, lines 4-19).

Regarding claims 37 and 48, Parmenter in view of Toskala teaches all the limitations of claims 36 and 47, respectively. Parmenter further teaches where the power reducing part sets an upper limit value of power for each group, and reduces a

power value to the upper limit value or below for each group (column 4, lines 40-48 and column 4, lines 1-11 and column 3, lines 6-9; where the appropriate power levels require a maximum allowable level without violating the integrity of the amplifier. Also, the adjustment is done for each channel and each channel transmits a type of communication, voice or data).

Regarding claims 38 and 49, Parmenter in view of Toskala teaches all the limitations of claims 37 and 48, respectively. Parmenter further teaches, where the classifying part classifies the calls according to degree of delay which is allowed by a circuit type of each call (figure 3, item 318; where the calls are classified as data calls, 322 or voice calls, 320 and column 3, lines 6-20; where inherently voice and data channels require different degrees of delay. E.g., voice does not tolerate high degrees of delay and data can tolerate higher degrees of delay).

Regarding claims 39 and 50, Parmenter in view of Toskala teaches all the limitations of claims 37 and 49, respectively. Parmenter further teaches where the classifying part classifies the calls into a group of a circuit switching type and a group of a packet switching type (figure 3, item 318; where the calls are classified as data calls, 322 or voice calls, 320 and column 3, lines 6-9; where the settings are preset according to the communication type, voice or data; where packet switching type corresponds to data communications and circuit switching type corresponds to voice communications).

Regarding claims 40 and 51, Parmenter in view of Toskala teaches all the limitations of claims 39 and 50, respectively. Parmenter further teaches where the upper limit value for a group of the packet switching type is smaller than the upper limit value

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for a group of the circuit switching type (column 3, lines 6-18; where the first upper limit value is smaller than a second upper limit value if it corresponds to the limit for voice communications).

Regarding claims 41 and 52, Parmenter in view of Toskala teaches all the limitations of claims 39 and 50, respectively. Parmenter further teaches where the power reducing part reduces only a power value of a group of the packet switching type (col. 4, lines 30-35; where each channel transmits a certain type of communication; therefore, when the power of a channel is reduced, only the power of one type of call is reduced; e.g., "packet switching type").

Regarding claims 42 and 53, Parmenter in view of Toskala teaches all the limitations of claims 37 and 48, respectively. Parmenter further teaches where the number of the plurality of groups and the upper limit value for each group are changed according to types of the calls (col. 4, line 30-35).

Regarding claims 43 and 54, Parmenter in view of Toskala teaches all the limitations of claims 36 and 47, respectively. Parmenter further teaches where the classifying part assigns priority for each call according to circuit characteristics of the each call, and the power reducing part reduces a power value of a call according to the priority (col. 7, lines 33-46; e.g., voice requires higher priority due to its low tolerance delay characteristic).

Regarding claims 44 and 55, Parmenter in view of Toskala teaches all the limitations of claims 43 and 54, respectively. Parmenter further teaches where the classifying part assigns the priority such that the larger a degree of delay which is

allowed by the call is, the lower the priority is (col. 7, lines 33-46; e.g., voice requires higher priority due to its low tolerance delay characteristic), and, the power reducing part reduces each power value of a part of calls in ascending order of the priority such that a power value of calls input to the power amplifier is equal to or below the maximum allowable input power value of the power amplifier (col. 1, lines 30-35; where data calls have lower priority due to higher tolerance delay characteristic and can take a reduction of power ahead of voice calls).

Regarding claims 45 and 56, Parmenter in view of Toskala teaches all the limitations of claims 44 and 55, respectively. Parmenter further teaches where a power value of a call which has priority within predetermined levels from the highest priority is not reduced (col. 8, lines 18-23; where the call with the highest priority is not reduced due to the fact that there are many other calls with lower priority whose power will be reduced first; thus, it is very unlikely for the call with the highest priority to receive power reduction at all).

7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Parmenter in view of Toskala, and further in view of Chuah.

Regarding claims 15, Parmenter in view of Toskala teaches all the limitations of claim 9. Toskala further teaches of the SIR determining part (column 6, lines 13-25; where the sent SIR determines the type of service required and power).

Parmenter in view of Toskala does not teach where the determining part monitors occurrence of over-input to the power amplifier, and sets another control target when the over-input occurs.

In related art, concerning a method and apparatus for enhanced power ramping via multi-threshold detector, Chuah teaches where the setting part monitors occurrence of over-input to the power amplifier, and sets another transmission power upper limit value when the over-input occurs (column 8, lines 40-46; where the power level exceeds a threshold and the a higher power limit transmit is set; e.g., "1 dB" higher).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Parmenter's and Toskala transmission power control apparatus with SIR determining part with Chuah's power upper limit change in order for not limiting the signal detection to access request signals but rather other type of signals, e.g., data signal, control signal or other type of signal, as taught by Chuah.

8. Claim 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over Parmenter in view of Toskala, and further in view Blois et al. (Blois, US Patent No.: 006,389,088 B1).

Regarding claim 57, Parmenter in view of Toskala teaches all the limitations of claim 54. Parmenter further teaches the steps of: assigning the priority such that the larger a degree of delay which can be allowed by the call, the lower the priority is (col. 7, lines 33-46; e.g., voice requires higher priority due to its low tolerance delay characteristic); determining at least a power reduction subject call from a call having the lowest priority in ascending order of priority such that a power value of calls input to the power amplifier becomes equal to or below the maximum allowable input power value if it is assumed that each power value of the at least a power reduction subject call is



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reduced to a minimum power value which can maintain synchronization (col. 1, lines 30-35; where data calls have lower priority due to higher tolerance delay characteristic and can take a reduction of power ahead of voice calls); reducing each power value of calls in the at least a power reduction subject call other than calls having the highest priority; and reducing each power value of calls having the highest priority in the at least a power reduction subject call evenly by a predetermined ratio such that a power value of calls input to the power amplifier becomes equal to or below the maximum allowable input power value (column 8, lines 18-20; where the power level is reduced in order to optimize the power consumption).

Parmenter in view of Toskala does not specifically teaches of at least a power reduction subject call to a minimum power value which can maintain synchronization.

In related art, concerning synchronization and tracking in a digital communication system, Blois teaches of at least a power reduction subject call to a minimum power value which can maintain synchronization (columns 11 and 12, lines 66-67 and 1-2; where synchronization is maintained when the power is above a minimum power limit).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Parmenter's and Toskala's transmission power control apparatus with Blois's maintenance of synchronization at a minimum power level in order to maintain communication, as taught by Blois.

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9. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Toskala in view of Parmenter.

Regarding claim 19, Toskala teaches of a mobile station for communicating with a base station (column 4, lines 4-19), the base station comprising: a part for comparing a received SIR with a target SIR which is stored in the base station (column 6, lines 10-12 and column 5, lines 63-67), and sending transmission power control information to the base station according to the comparing result (column 6, lines 13-16); a part for receiving a control target SIR from the base station (column 5, line 61-62; where the target SIR is sent from a BS to a MS in a down-link connection), and setting the control target SIR as a new target SIR to be compared with the received SIR (column 6, lines 45-50); the transmission power control apparatus comprising: an SIR determining part for determining the control target SIR according to a circuit type of a call; a target SIR setting part for sending the control target SIR to the mobile station (columns 2, 6 and 7, lines 3-16, 10-12 and 1-17, respectively; where the settings comply with the type of service; e.g., target SIR for speech and data are "-4.2 dB" and "-3.5 dB", respectively).

Toskala teaches of a base station; however, Toskala does not specifically teach of a transmission power control apparatus for reducing a power value of a signal input to a power amplifier to the maximum allowable input power value of the power amplifier or below, the transmission power control apparatus comprising: transmission power control parts each for controlling a transmission power of a call according to transmission power control information sent from a communication apparatus that is a sending destination of the call.

In related art, concerning a radio frequency control algorithm, Parmenter teaches of a transmission power control apparatus for reducing a power value of a signal input to a power amplifier to the maximum allowable input power value of the power amplifier or below (column 4, lines 1-11; where the control processor adjusts the power to a "limit" output power corresponding to a "maximum allowable input"), the transmission power control apparatus comprising: transmission power control parts each for controlling a transmission power of a call according to transmission power control information sent from a communication apparatus that is a sending destination of the call (figure 2, where parts 212, 214, 218, 106 and 108 control the power of the signal according to a "maximum allowable input").

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Toskala's base station with Parmenter's transmission power control apparatus in order to reduce transmission power for a call and optimize the power consumption of the system, as taught by Parmenter.

10. Claims 16 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parmenter in view of Toskala et al. and further in view of Johansson.

Regarding claims 16 and 35, Parmenter in view of Toskala teaches all the limitations of claims 9 and 28, respectively.

Parmenter in view of Toskala does not teach where the setting part monitors occurrence of call loss, and sets another transmission power upper limit value when the call loss occurs.

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In related art, concerning a temporary serviced interruption for high speed data transfer, Johansson teaches of where the setting part monitors occurrence of call loss, and sets another transmission power upper limit value when the call loss occurs (columns 1 and 2, lines 63-67 and 1-18, respectively and columns 5 and 6, lines 19-67 and 1-29, respectively; where the system records information regarding loss of communication; e.g., de-allocation, and the transmit power is adjusted in order to prevent loss of calls or overload of the system).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Parmenter's and Toskala's combined transmission power control apparatus with Johansson's adjustment transmission power upper limit value when the call loss occurs in order to prevent loss of calls or overload of the system, as taught by Johansson.

11. Applicant's arguments with respect to claims 1-57 have been considered but are moot in view of the new ground(s) of rejection.

**Conclusion**

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angelica Perez whose telephone number is 571-272-7885. The examiner can normally be reached on 7:00 a.m. - 3:30 p.m., Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and for After Final communications.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either the PAIR or Public PAIR. Status information for unpublished applications is available through the Private PAIR only. For more information about the pair system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Information regarding Patent Application Information Retrieval (PAIR) system can be found at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600's customer service number is 703-306-0377.

  
Angelica Perez  
(Examiner)  
NAY MAUNG  
SUPERVISORY PATENT EXAMINER

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June 2, 2005